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A New Heterotanais and a new Eurydice, Genera of Isopoda.

19

From the ANNALS AND MAGAZINE OF NATURAL HISTORY,
Ser. 7, Vol. xvii., *January* 1906.

A new Heterotanais *and a new* Eurydice, *Genera of Isopoda.*

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[Plates V. & VI.]

Genus HETEROTANAIS, G. O. Sars.

The genus *Heterotanais* was established by Sars in 1880 ("Revision af Gruppen: Isopoda Chelifera," Arch. f. Math. og Naturv. p. 28), and four species were assigned to it:—*Heterotanais Örstedi* (Kröyer), Scandinavian; *H. anomalus*, sp. n., Mediterranean; *H. limicola* (Harger), N.E. American; and *H. tenuis* (Thomson), New Zealand. More recently M. A. Dollfus ("Campagnes de la 'Melita,' Tanaidæ &c.," Mém. Soc. Zool. de France, vol. xi. 1898, pp. 37–47) has assigned

two more species to the genus—*H. algiricus*, from Algeria, and *H. provincialis*, from Golfe de Saint-Tropez. The species now to be described comes nearest to *H. Örstedi*.

Heterotanais Gurneyi, sp. n.
(Pl. V. figs. 1–7; Pl. VI. fig. 1.)

Heterotanais sp. (?), Robert Gurney, "The Fresh- and Brackish-Water Crustacea of East Norfolk," Trans. Norfolk and Norwich Naturalists' Soc. vol. vii. 1904, p. 650.

Mr. Robert Gurney, in his excellent paper on the fauna of the Broads &c. of Norfolk, indicated as above a Tanaid which he had found in brackish water. He was subsequently so kind as to send me a male specimen and also drawings of the female, with a request that I would describe the species; from that specimen and the drawings the following characters are given.

The length of the female is equal to about five times that of the breadth, and the breadth is nearly equal throughout. The cephalosome is as long as the first three segments of the mesosome and half of the fourth; the fourth and fifth segments of the mesosome are the longest; and the metasome equals the two and a half preceding segments in length. The antennules are three-jointed, the first exceeding in length the two distal joints combined. The cheliped is almost exactly like that of *H. Örstedi*, the thumb having three crenations and as many setæ. The second pair of legs have the characteristic formation usual in the genus.

The male has the cephalosome produced and very compressed, narrowed greatly in front to the region of the eyes. The metasome is fully equal in length to half the mesosome. The antennules consist of five articulations, of which the terminal is the shortest, and the second nearly equals the combined lengths of the last three. The cheliped in general structure resembles that of *H. Örstedi*, but as seen from the outside the carpus is not projected so far forwards, while the thumb-process is of entirely different form, (not narrowed at the base, and thence widening, but) narrow throughout its length and of subequal breadth, until near its termination it is bent forwards, and pointed at the extremity. The uropods have the outer branch minute, two-jointed; the inner four-jointed, the two distal joints being subequal to the second in length.

This species very nearly resembles *H. Örstedi* in most

particulars, but the thumb of the cheliped is of widely different form.

Hab. Procured by Mr. Robert Gurney at Six-mile House, on the Bure, and also at Reedham, on the Yare, Norfolk.

Heterotanais Örstedi (Kröyer).
(Pl. VI. figs. 2, 3.)

1842. *Tanais Örstedi*, Kröyer, Naturhist. Tidssk. vol. iv. p. 183; Voyages en Scand. &c. pl. xxxi. figs. 3 *a–l*. ♀.
1842. *Tanais curculio*, Kröyer, *l. c.* p. 184; Voyages &c. pl. xxx. figs. 4 *a–h*. ♂.
1852. *Tanais balticus*, Friedrich Müller, "*Tanais rhynchites* and *balticus* neue Arten aus der Ostsee," Archiv f. Naturg. 18 Jahrg. p. 89. ♀.
1852. *Tanais rhynchites*, Friedrich Müller, *l. c.* p. 88. ♂.
1896. *Tanais Örstedi*, G. O. Sars, Crust. Norway, II. Isopoda, p. 14, pl. vi. ♂ ♀.

In this species the thumb or "posteriorly-pointing lappet" of the cheliped of the male is narrow at the base, and widening thence in clavate form has the extremity truncated, with a little notch near the anterior corner. It is similarly represented in the figures of Kröyer, Müller, and G. O. Sars, and the figures given by Müller are here reproduced (Pl. VI. figs. 2, 3) for comparison with the better-known illustrations of Sars. These drawings will show how much this appendage differs from that of *H. Gurneyi*.

Heterotanais Örstedi is recorded from Öresund (*Kröyer*); Baltic, at Landskrona and Westervic (*Lilljeborg*); Prussia, at Greifswalde (*Müller*); Bohuslän (*Lilljeborg*); Christiansand (*Boeck*); and Iddefjord, at Fredrikshald, Norway (*G. O. Sars*). Specimens in my own collection are from Landskrona (*Lilljeborg*) and Denmark (from Copenhagen Museum).

Genus Eurydice, Leach.

Eurydice rotundicauda, sp. n.
(Pl. VI. figs. 4–7.)

Antennules a little shorter than the peduncle of the antennæ; flagellum consisting of four articulations, combined length of the three distal slightly less than that of the first, which is wholly devoid of the dense covering of downy setæ

usual in species of the genus; last joint furnished with a few setæ at the extremity.

Antennæ with the last joint of the peduncle much longer than the penultimate, much constricted at the base.

First feet with the fourth joints very small. There are five spines on the third joint, one on the fourth joint, and four on the hand.

The last legs are wholly devoid of spines on the face of the limb; the ends of the joints are truncate, the third not at all produced downwards behind.

The telson is broader than long, very widely and evenly rounded at the extremity, and furnished with about sixteen serrulations of equal size, alternating with setæ. Uropods longer than the telson and reaching to some distance beyond its extremity; both inner and outer branches bear two small distal spines, buried among the fringing setæ.

The broad telson, with its widely rounded and distally serrulated extremity and absence of spines or of lateral serrulations larger than the others, at once distinguishes this species from its allies. The forms nearest to it are *E. pulchra* and *E. inermis*; but in the former the extremity is not nearly so wide and two pairs of spines are present among the serrulations, while in the latter the extremity is not equally rounded, the outermost serræ are somewhat larger than the others, and the uropods are distinctly shorter than the telson. The specimen is a female.

The type here described was dredged by the 'Porcupine' in 1869, but unfortunately no number of the dredging is with the specimen, and therefore the nearest approach which can be given as the habitat is Eastern North Atlantic.

EXPLANATION OF THE PLATES.

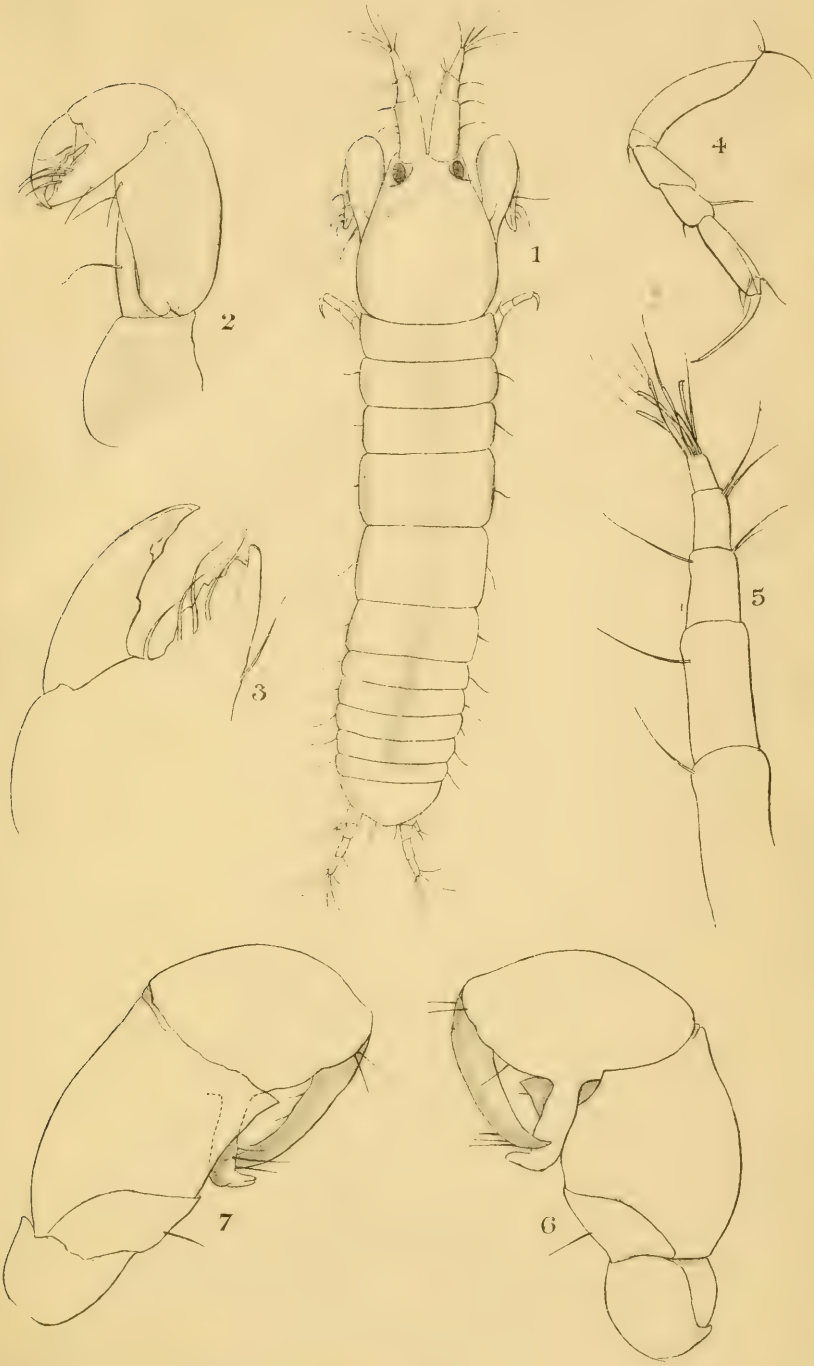
Plate V.

Fig. 1. *Heterotanais Gurneyi*, sp. n., ♀, dorsal view.
Fig. 2. „ „ Cheliped, ♀.
Fig. 3. „ „ Chela of cheliped, ♀.
Fig. 4. „ „ Second leg, ♀.
Fig. 5. „ „ Antennule, ♂.
Fig. 6. „ „ Cheliped, ♂, inner face.
Fig. 7. „ „ „ „ outer face.

Plate VI.

Fig. 1. *Heterotanais Gurneyi*, sp. n. Uropod, ♂.
Fig. 2. *Heterotanais Örstedi*, Kröyer. Cheliped, ♂, inner face. After F. Müller.

Fig. 3. *Heterotanais Örstedi*, Kröyer. Cheliped, ♂, outer face. After F. Müller.
Fig. 4. *Eurydice rotundicauda*, sp. n. Antennules and antennæ.
Fig. 5. „ „ First leg.
Fig. 6. „ „ Seventh leg.
Fig. 7. „ „ Telson and uropods.



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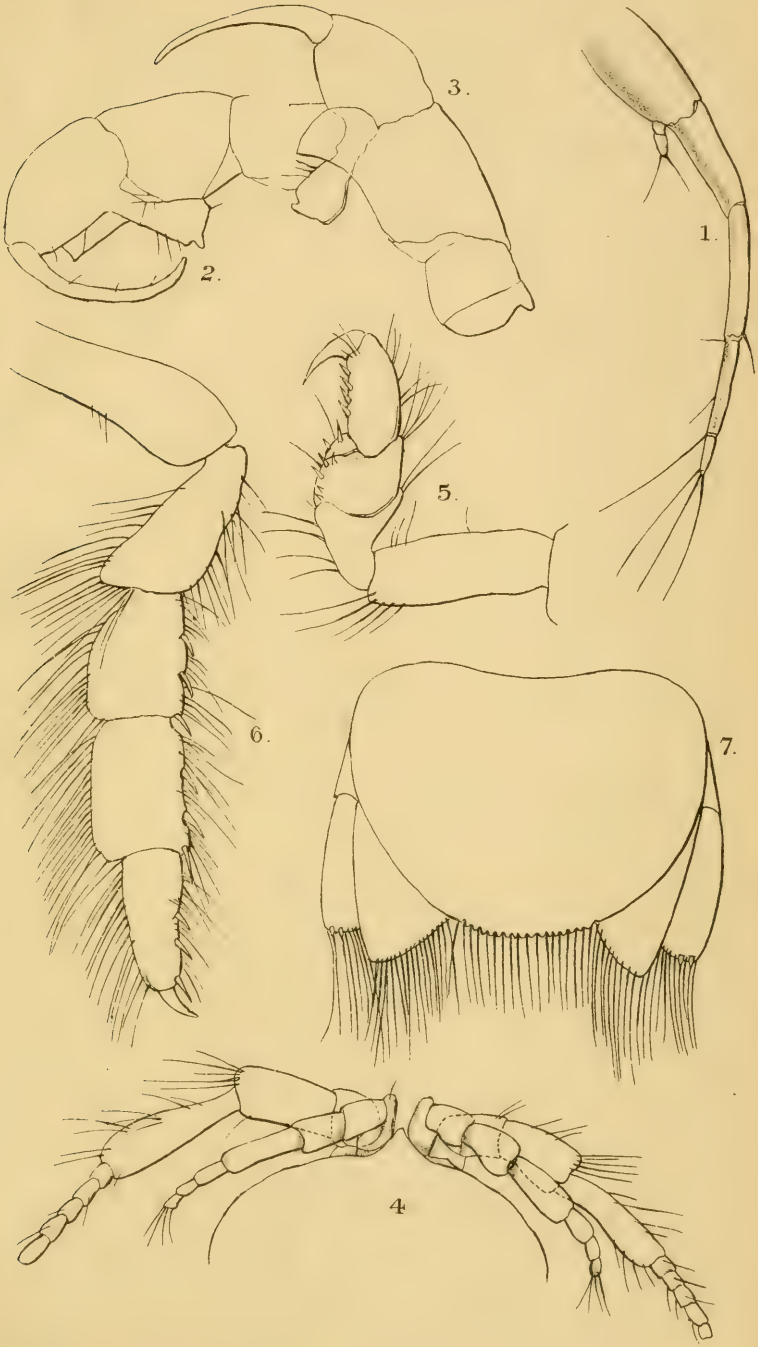

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